

The following recitation of claims supersedes all previous recitations.

In the Claims:

1. (Currently Amended) ~~An~~ A substantially neat liquid ionic compound comprising a cation which is a complex of a neutral liqand selected from the group consisting of organic amines and crown ethers with a metal ion selected from the group consisting of  $\text{Ag}^+$ ,  $\text{Zn}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Cd}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Hg}^{2+}$ ,  $\text{Co}^{3+}$  and  $\text{Fe}^{3+}$  and an anion which is a conjugate anion of the metal ion.
2. (Previously Presented) An ionic compound according to claim 1 which is a liquid below  $100^\circ\text{C}$ .
3. (Previously Presented) An ionic compound according to claim 2 which is a liquid at room temperature.
4. (Previously Presented) An ionic compound according to claim 1 which is electrically conductive in the absence of a solvent.
5. (Previously Presented) An ionic liquid according to claim 1 which is hydrophobic.
6. (Previously Presented) An ionic compound according to claim 1 wherein said neutral organic liqand is a crown ether.
7. (Previously Presented) An ionic liquid according to claim 1 wherein the neutral organic liqand is at least one alkyl amine.

8. (Previously Presented) An ionic compound according to claim 1 wherein said conjugate anion is bis(trifluoromethane)sulfonimide, boron trifluoride, nitrate, sulfate, phosphate, hexafluorophosphate and dicyanamide.

9. (Currently Amended) A method for forming an a substantially neat ionic liquid comprising mixing a neutral ligand selected from the group consisting of organic amines and crown ethers with a metal ion selected from the group consisting of  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Li}^+$ ,  $\text{Ca}^{2+}$ ,  $\text{Ag}^+$ ,  $\text{Zn}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Cd}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Hg}^{2+}$ , and  $\text{Fe}^{3+}$  and with the salt of a metal cation and its conjugate anion at room temperature.

10. (Original) A method according to claim 9 wherein said neutral organic ligand is a crown ether.

11. (Original) A method according to claim 10 wherein the metal cation is selected from the group consisting of sodium potassium, lithium and calcium.

12. (Original) A method according to claim 9 wherein said neutral organic ligand is an alkylamine.

13. (Original) A method according to claim 12 wherein said metal cation is selected from the group consisting of silver, zinc, copper, cadmium, nickel, mercury and iron.

14. (Previously presented) A method according to claim 9 wherein said conjugate anion is bis(trifluoromethane)sulfonamide, boron trifluoride, nitrate, sulfate, phosphate, hexafluorophosphate and dicyanamide, selected from the group consisting of organic amines and crown ethers with a metal ion selected from the group consisting of  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Li}^+$ ,  $\text{Ca}^{2+}$ ,  $\text{Ag}^+$ ,  $\text{Zn}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Cd}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Hg}^{2+}$ , and  $\text{Fe}^{3+}$  and an anion which is a conjugate anion of the metal ion.
15. (Original) A method according to claim 9 which is performed at room temperature.
16. (Previously Presented) An ionic compound according to claim 1 which may be used as a solvent.
17. (Previously Presented) An ionic compound according to claim 1 which may be used for gas liquid separation.
18. (Previously Presented) An ionic compound according to claim 1 which may be used for solvent extraction.
19. (Previously Presented) An ionic compound according to claim 4 which is used in electrical devices.
20. (Previously Presented) An ionic compound according to claim 1 which is used as a heat transfer fluid.